

# Assembly, Operator's and Parts Manual

Part No. P4166

### **WARRANTY REGISTRATION AND POLICY**

Buhler Manufacturing products are warranted for a period of twelve (12) months from original date of purchase, by original purchaser, to be free from defects in material and workmanship under correct, normal agricultural use and proper applications.

Buhler Manufacturing's obligations under this warranty shall be limited to the repair or exchange, at Buhler Manufacturing's option, of any Buhler Manufacturing product or part which proves to be defective as provided. Buhler Manufacturing reserves the right to either inspect the product at the buyer's location or have it returned to the factory for inspection.

The above warranty does not extend to goods damaged or subject to accident, abuse or misuse after shipment from Buhler Manufacturing's factory, nor to goods altered or repaired by anyone other than an authorized Buhler Manufacturing representative.

Buhler Manufacturing makes no Express Warranties other than those which are specifically described. Any description of goods, including any references and specifications in catalogues, circulars and other written material published is for the sole purpose of identifying goods and shall conform to such descriptions. Any sample or model is for illustrative purposes only and does not create an Express Warranty that the goods conform to sample or model shown.

The purchaser is solely responsible for determining suitability of goods sold. This warranty is expressly in lieu of all other warranties expressed or implied. Buhler Manufacturing will in no event be liable for any incidental or consequential damages whatsoever, nor for any sum in excess of the price received for the goods for which liability is claimed.

#### **WARRANTY CLAIMS:**

Warranty requests must be prepared on Buhler Manufacturing Warranty Claim Forms with all requested information properly completed. Warranty Claims must be submitted within a thirty (30) day period from date of failure repair.

#### **WARRANTY LABOR:**

Any labor subject to warranty **must** be authorized by Buhler Manufacturing. The labor rate for replacing defective parts, where applicable, will be credited at a rate determined by the Company, Buhler Manufacturing.

IMPORTANT FACTS:

Buckets and Bucket Tines Carry No Warranty Bent Spears Carry No Warranty

Snowblower Fan Shafts Carry No Warranty

Mower Blades Carry No Warranty

Portable Auger Parts Have Two (2) Year Warranty

Loader Parts Have Two (2) Year Warranty

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## 95 & 195 Hydraulic Farm Loader

# Operator's Manual Table of Contents

Section	Description	Page
	Warranty Registration and Policy Table of Contents	
Introduction	Loader Specification Chart	2
and	Pre-delivery Check List	3
Identification	Loader Identification Diagram	3
	Hydraulic Hose Kit Identification Diagrams	4
Safety	Important Precautions	5
and	Safety	6
Pre-use	Safety Decals	7
Information	Torque Chart	7
	Lubrication and Decal Location Diagram	8
	General Instructions and Information	9
	Operating Suggestions for Loading	10
Operating	Operating Suggestions for Backfilling	11
Information	Attaching the Loader to Your Tractor	12
	Removing the Loader from Your Tractor	14
	Operation and Maintenance	16
	Trouble Shooting	17
Assembly	Subframe Diagram	18
and	Mainframe Diagram	20
Parts	Hydraulic Plumbing Diagram	22
Information	Hydraulic Cylinder Assembly	24



IMPORTANT

PLEASE READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING LOADER.

**Loader Specifications** 

#### Model number: 95 REGULAR

Mounting height: 23.0" nominal (Typical range: 20.0" - 26.0")

#### Cylinder specifications:

				Extended	Retracted
Cylinder	Bore	Rod	Stroke	Length	Length
Bucket	1.50"	1.00"	13.25"	34.75"	21.50"
Lifting	1.50"	1.00"	14.50"	37.00"	22.50"

- A) Maximum lift height (full height): 78.0"
- B) Clearance with bucket dumped (full height): 61.0"
  C) Reach at full height: 18.0"
  D) Maximum dump angle (full height): 45.0 deg.

- F) Bucket rollback angle (ground): 14.0 deg.
- G) Digging depth: 3.9"
- H) Overall height in carry position (12"): 48.0"
- R) Rollback angle at full height: 96.0 deg.

Estimated breakout force: 850 lbs

Estimated lift capacity: 525 lbs

- 1) Estimated values assume 1800 psi lift cylinder pressure.
- 2) Breakout force estimated as per ASAE S301.3 5.1.6 (Net payload applied at 31.5" forward of bucket pivot).
- 2) Difficapacity estimated as per ASAE 5301.3 5.1.1 (Net payload applied at bucket pivot pin)
  4) Main pivot pins: 1.00" dia. All other pins: 0.75" dia.

# Model number: 195 REGULAR

Mounting height: 26.0" nominal (Typical range: 23.0" - 29.0")

#### Cylinder specifications:

Cylinder	Bore	Rod	Stroke	Extended Length	Retracted Length
Bucket	2.00"	1.25"	13.38"	37.00"	23.63"
Lifting	2.00"	1.50"	15.00"	40.00"	25.00"

- A) Maximum lift height (full height): 90.0"
- B) Clearance with bucket dumped (full height): 74.0"
- C) Reach at full height 15.0"
- D) Maximum dump angle (full height): 40.0 deg.
- F) Bucket rollback angle (ground): 19.0 deg.
- (G) Digging depth: 3.3"

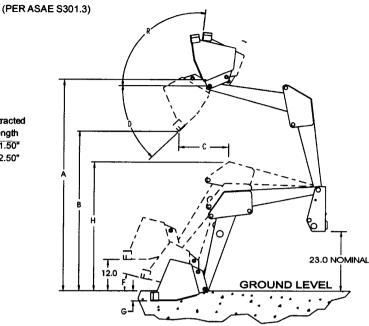
  H) Overall height in carry position (12"): 51.0"

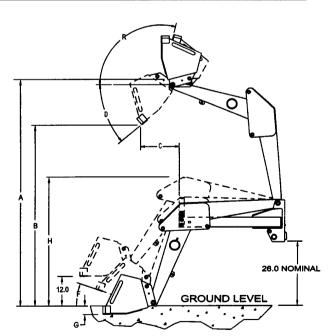
  R) Rollback angle at full height: 104.0 deg.

Estimated breakout force: 1600 lbs

Estimated lift capacity: 1150 lbs

- 1) Estimated values assume 2000 psi lift cylinder pressure.
- 2) Breakout force estimated as per ASAE S301.3 5.1.6 (Net payload applied at 31.5" forward of bucket pivot).
- 3) Lift capacity estimated as per ASAE S301.3 5.1.1 (Net payload applied at bucket pivot pin)
- 4) Main pivot pins: 1.00" dia. All other pins: 0.75" dia.





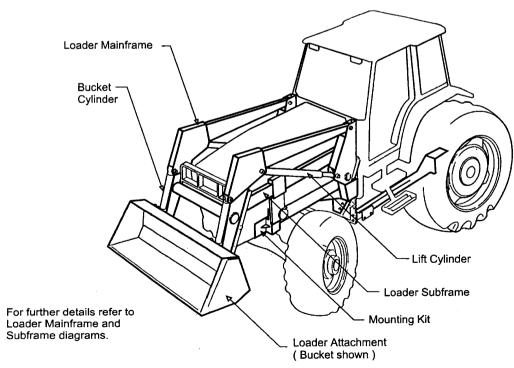
# Dealer Pre-delivery Check List

Before delivering this equipment please complete the following check list.

Ш	The loader has been installed using the appropriate mounting kit for the tractor and loader.
	2. The hydraulic system installed is appropriate for the tractor and loader.
	3. The loader is properly installed.
	4. All bolts are tightened to the torque specifications shown in the torque chart.
	5. All safety decals are readable.
	6. The loader has been tested and operates properly.
	7. The operator's manual has been delivered to the owner who has been instructed on the safe and proper use of the loader.
	Dealer's Signature
This i	Chack List is to remain in this Owner's Manual and is the responsibility of the Dealer to

This Check List is to remain in this Owner's Manual and is the responsibility of the Dealer to complete before delivery to the customer.

# Loader Identification Diagram



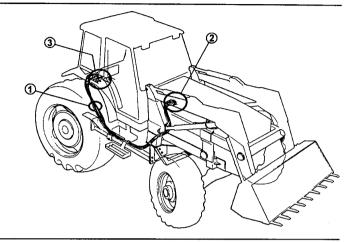
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# Hydraulic ( Hose Kit ) Identification Diagrams

#### HOSE KIT "A"

Loader powered by the tractor remotes "3".

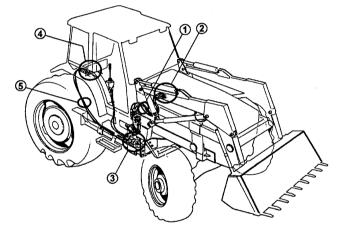
Consists of four hoses "1" leading from loader tubing "2" to tractor remote couplers"3".



#### HOSE KIT "B"

Loader operated by an external OC or CC valve "3" that is powered from the tractor remotes "4".

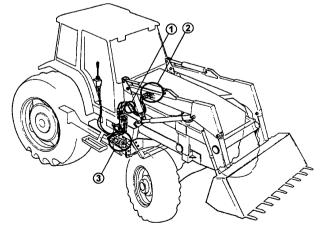
Consists of four hoses "1" leading from loader tubing "2" to external mounted valve "3" and two hoses "5" from valve "3" to tractor couplers "4". Use the valve type shown with hose Kit "B".



#### HOSE KIT "C"

Loader operated by an external valve "3" that is plumbed into the tractor hydraulic system.

Consists of four hoses "1" leading from loader tubing "2" to the external mounted valve "3" plus the necessary fittings, hoses and adapter blocks (if necessary) to tap into tractor hydraulic system. Use valve type shown with hose Kit "C".





# **IMPORTANT PRECAUTIONS**



# DANGER





#### **ELECTROCUTION HAZARD**

To prevent serious injury or death:

 Stay away from power lines and cables.
 Electrocution can occur with or without direct contact.

# **MARNING**



#### FALLING HAZARD

To prevent serious injury or death:

 Do not lift, carry or allow anyone to ride on or work from any portion of loader.

### WARNING



#### CRUSHING HAZARD

To prevent serious injury or death:

- Do not handle round bales or other shiftable objects unless loader is equipped with an attachment designed for this purpose.
- Do not handle loose loads that are not secured.
- Do not lift load higher than necessary.

# A

## **WARNING**





#### HIGH-PRESSURE FLUID

To prevent serious injury or death:

- Relieve pressure on system before repairing or adjusting or disconnecting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair.
- If hydraulic fluid penetrates skin, obtain medical treatment IMMEADIATELY.

# **WARNING**



#### **ROLL-OVER HAZARD**

To prevent serious injury or death:

- Move and turn tractor at low speed.
- Carry load no higher than necessary to clear the ground when transporting.
- Add wheel ballast or rear weight for stability.
- Move wheels to widest possible settings to increase stability.
- It is recommended the tractor be equipped with a rollover protective structure (ROPS).

## **WARNING**



#### CRUSHING HAZARD

To prevent serious injury or death:

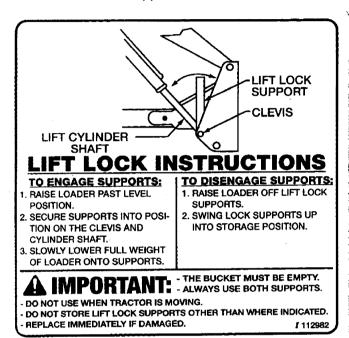
- Do not allow bystanders in loader work area.
- Lower loader to the ground before leaving seat.
- Do not walk or work under raised loader. For servicing, refer to operator's manual.
- Read and understand operator's manual before operating loader.

5

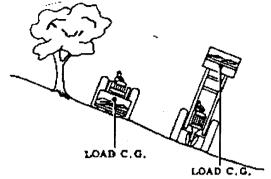
### **Safety**

#### **BLOCKING RAISED LOADER**

 Never work beneath raised loader unless it is securely supported. The following are instructions for the Lift Lock Supports;

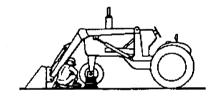


- Do not pivot or turn tractor with bucket raised, except at a minimum speed. Always make allowance for length of loader when making turns.
- Never leave tractor unattended while the bucket is raised. Always lower bucket to the ground and shut off before leaving tractor seat.
- Do not walk under raised bucket.
- Never operate loader while operator is not seated in the driver's seat on the tractor.
- Keep tractor on solid ground. Loose fill, rocks and holes can be dangerous for loader operation or movement.
- Never operate a loader with frayed or damaged hoses or leaking fittings.
- For stability, rear wheels of tractor should be set a maximum convenient spacing and add ballast to rear wheels.



 Do not raise bucket to extreme heights while tractor is on an incline. Carry loader low for safety. Note in above illustration how load center moves out when bucket is raised on a slope. Be alert for terrain changes and adjust bucket accordingly. Keep bucket low, no more than one foot high, as long as possible.

Note: A pivoting front axle acts like a three-wheeled tractor until the stops hit the axle.



 If lift cylinders are used to raise front wheels of tractor for service, place blocks under tractor before working around front end.

THIS SAFETY ALERT SYMBOL MEANS:

ATTENTION!

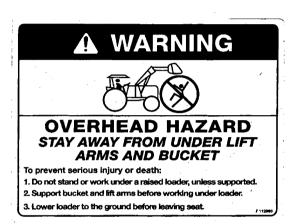
**BECOME ALERT!** 

YOUR SAFETY IS INVOLVED!



### **Safety Decals**

These decals are located as shown on the Decal Location diagram and the Sub-Frame Assembly diagram.



- 1. Read Operator's Manual before operating.
- Move and turn tractor at low speed.
   Carry loader arms at a low position during transport.
   Lower loader arms, stop engine and lock brakes before
- leaving operator seat.

  5. Do not stand or work under raised loader, unless properly
- supported.
  6. Add recommended wheel ballast or rear weight for stability.
  7. Move wheels to widest recommended settings to increase
- stability.

  8. Do not handle large round bales or other shiftable objects unless loader is equipped with a grapple fork.
- unless loader is equipped with a graphie form.

  9. Do not use loader to move or carry people.

  10. Stay away from power lines. Electrocution can occur without direct contact.

  11. Review safety instructions annually.

### **Torque Specifications**

Recommended Torque in Foot Pounds (ft-lbs) & Newton Meters (NM)\*

Standard							
				Bolt F	lead		
Bolt Diameter (inches)	Wrench Size (inches)			{		$\langle \rangle$	$\searrow$
		Grad (ft-lbs)	de 2 (NM)	Grac (ft-lbs)		Grad (ft-lbs)	
0.250 1/4	7/16	6	7	8	11	12	16
0.313 5/16	1/2	11	15	17	23	25	33
0.375 3/8	9/16	20	27	31	42	44	60
0.438 7/16	5/8	32	43	49	66	70	95
0.500 1/2	3/4	49	66	76	103	106	144
0.563 9/16	7/8	70 _	95	109	148	153	207
0.625 5/8	15/16	97	131	150	203	212	287
0.750 3/4	1 1/8	144	195	266	360	376	509
0.875 7/8	1 5/16	166	225	430	583	606	821
1.000 1	1 1/2	250	339	644	873	909	1232
1.125 1 1/8	1 11/16	354	480	795	1077	1288	1745
1.250 1 1/4	1 7/8	500	678	1120	1518	1817	2462
1.375 1 3/8	2 1/16	655	887	1470	1992	2382	3228
1.500 1 1/2	2 1/4	870	1179	1950	2642	3161	4283

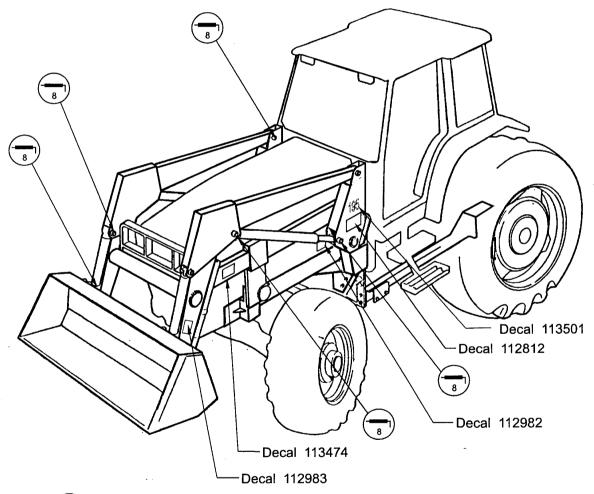
Metric							
				Bolt I	Head		
Bolt Dia. (mm)	Wrench Size (mm)	4.	6	8	.8	<b>_</b>	.8
		Class (ft-ibs)	s 4.6 (NM)	Class 8.8 (ft-lbs) (NM)			
8	13	7.3	10			21.1	29
10	16	14.5	20			42	57
12	18	25	34	74	100	73	99
14	21	40	54	118	160	116	157
16	24	62	84	167	226	181	245
20	30	122	165	325	440		
22	33			443	600		
24	36	211	286	563	763		
27	41			821	1112		
30	46	418	566	1119	1516		

<sup>\*</sup>Use 80% of the specified torque value for plated or lubricated fasteners.

# Lubrication and Decal Location Diagram

Lubricate tractor hydraulic unit as indicated in tractor Operator's Manual. Keep the bushings on lift arm pivots and cylinders well lubricated. Use high grade lithium grease every 8 hours of operation.

NOTE: Frequent greasing will prevent contaminants from migrating between the pins and bushings.



Symbol indicating grease after every 8 hours of operation.

(195 Model shown)

8 P3696-08-07

#### General Instructions and Information

As with any piece of equipment, the care with which your loader is operated and maintained will greatly affect it's life and the safety of the people using it.

- Keep all pivots well lubricated for longer bushing life. Inspect every 500 hours of operation for wear.
- 2. Periodically check all bolts for tightness. If any bolt is damaged, replace it with a bolt of equivalent grade or strength.
- 3. Follow the recommendations of the tractor manufacturer in regards to the quantity of oil used.
- 4. Check oil level frequently to ensure the system is full.
- 5. When making an oil check, be sure lift cylinders are retracted.
- 6. Before operating the loader, particularly if the loader is left standing for any length of time, check the hydraulic system and oil level.
- 7. When installing hydraulics, follow the circuit carefully. See hydraulic hook-up section and make sure the hoses do not contact any hot manifolds or sharp edges on tractor. After assembly, raise the loader slowly and check to make sure that the hoses do not bind in all positions.



CAUTION

The pressure of the relief and open centre valves is set at the factory. Do not tamper with the setting. Serious injury to the operator or damage to the loader or tractor hydraulics may occur. Warranty will be void if the loader is operated above recommended pressure.

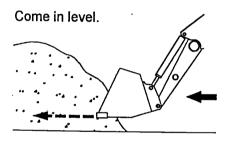
- 8. When servicing any hydraulic components, care must be taken to prevent any foreign matter from entering the system.
- 9. Do not neglect oil leaks. Leaks affect loader operation, are dangerous and can result in personal injury or damage to the hydraulic system.
- 10. Never leave the cylinder shafts exposed when loader is not in use.
- 11. Worn or damaged components should be replaced as soon as possible with only the manufacturer's recommended component or equivalent.

9 REG-09 CDR

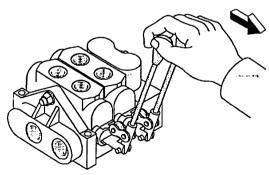
# Operating Suggestions For Loading

When handling heavy loads, be sure to lower lift arms slowly. This is known as feathering the hydraulic lever. If load is lowered too fast and stopped suddenly, excessive shock loads are created which can damage loader or tractor.

When loading bucket, drive straight into material. Attempting to turn tractor while loading bucket can cause damage to both the loader and tractor.



NOTE: Bottom surface of bucket is parallel to line on motion.



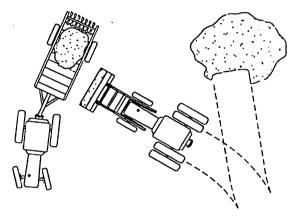
Work both levers back to direct pressure to both cylinders.

Combined action of lift and bucket cylinders increases loading efficiency.

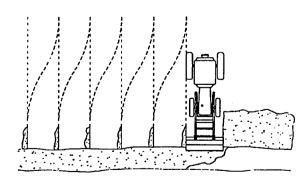
# DO THIS!

**NOT THIS!** 

A straight bottom offers more resistance to lift.

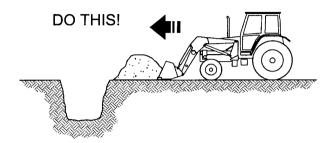


To increase loading efficiency, minimize angle of turn and length to run between pile and spreader.



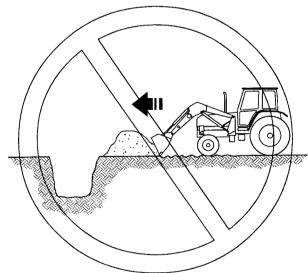
Leave material which drifts over side of bucket for final clean-up.

# Operating Suggestions For Backfilling



When backfilling, approach pile with a flat bucket. Leave dirt in bucket. Dumping on each pass wastes time.





DO NOT use bucket in dumped position for bulldozing. This will only impose severe shock loading on the bucket cylinders and make it more difficult to maintain a level grade.



Backgrade work surface with a loaded bucket. Release all pressure on lift cylinders so full weight of bucket is scraping ground. Use heel of bucket.

DO NOT use bucket in dump position for backgrade work. This could cause bucket cylinder shaft failure.

# **WARNING!**

# DO NOT USE LOADER AS BATTERING RAM!



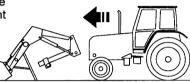
SAFETY: FIRST, LAST, ALWAYS!

#### Attaching the Loader to Your Tractor

- Position the tractor as centrally as possible and drive, using lowest gear possible, into the loader frame until hoses can be connected.
- 2. Couple up the hydraulic hose lines to the loader or tractor valve ensuring proper function (see Operator and Maintenance Section).

NOTE: When mounting the loader for the first time, slowly work the cylinders back and forth, so that most of the air is removed. Loosen the bolts on the hooks so that they can be moved. Also, check that the nuts in the rear of the subframes are in line with the holes.

3. On some tractors, the lift cylinders may have to be extended slightly, so that the subframes can clear the front axle. Do not extend the cylinders more than is required.



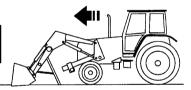


IMPORTANT! On HSL loaders, the bucket will dump at the same time the loader is lowered. Therefore, operate both hydraulic levers together.

4. Drive the tractor ahead until the subframe is past the front axle and the front hook is close to mounting boss.



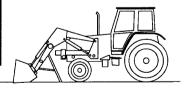
WARNING! Check front grill clearance during installation to avoid tractor damage.



5. Retract or extend the lift cylinders to line up the front hook with the mounting boss.



IMPORTANT! On HSL loaders, the bucket will roll back at the same time the loader is lowered. Therefore, operate both hydraulic levers together.



12

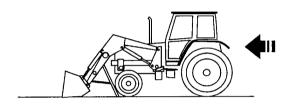
# Attaching the Loader to Your Tractor (Continued)

6. When the hook is lined up, dump or roll back the bucket to lower or raise the subframe upright to align with the mounting boot.



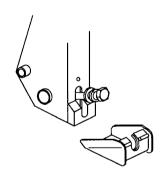
7. Continue to drive the tractor forward until the subframe uprights are seated in the boot.

IMPORTANT: For 95 installation, bolt one strut arm to the front mounting kit clevis, and another to the inside hole provided on the upright. Align the two struts and bolt together utilizing the outermost aligning bolt holes.



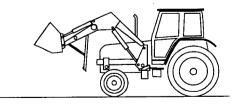
8. Secure the subframe uprights with the bolts and washers. Torque to 500 ft-lbs.

IMPORTANT: When mounting the 195 for the first time, the front hook bolts will have to be tightened after positioning the hook directly over the mounting boss (most rearward position).



9. Raise the loader and lock the support stand tubes into the up position.

NOTE: When mounting for the first time, raise the loader slowly and check to make sure that the hoses do not bind or become pinched in all positions. Work the loader and bucket up and down to work out all the air in the hydraulics. Check and refill the tractor's hydraulic system.



### Removing the Loader from Your Tractor

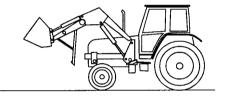


WARNING! When removing the loader, it must be fitted with a bucket or other suitable attachment to give the frame stability after removal. If this is not done, the frame will not remain standing.



IMPORTANT! Always remove the loader on firm, level ground (away from children's play areas and high traffic areas). This makes attaching and removing much faster and easier. It also makes the free standing loader more stable.

 Raise the loader, lower support stand and lock into position.



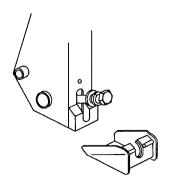
2. Lower the loader until the stands are firmly on the ground and then dump the bucket so that it is also firmly on the ground. There should be a slightly downward pressure.



3. Loosen the bolts from the rear of the subframe boots and swing bolt up into lock position.

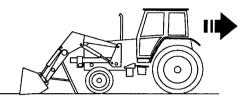


IMPORTANT! On 95 loader, remove strut bolt at front mounting kit clevis. Strut assembly may remain bolted, as is, to upright.



# Removing the Loader from Your Tractor (Continued)

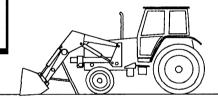
4. Roll back the bucket slightly and simultaneously extend or retract the lift cylinders to free hooks from spools. Then slowly back up the tractor.



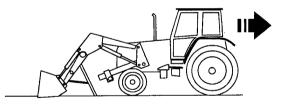
5. Once the subframe is clear of the boot and the hook is clear of the mounting boss, roll back the bucket all the way. This raises the rear uprights of the loader.



NOTE: On some mountings, the lift cylinders must be extended more while the tractor is backing up, so that the subframes clear the front axle.



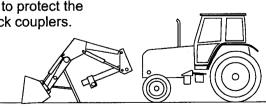
6. Continue backing up until the loader is clear.





CAUTION! Be sure the hoses DO NOT get pinched or catch on any frame members while backing up.

7. After the loader is clear, retract the lift cylinders to protect the shafts and disconnect the hydraulic lines at quick couplers.



### **Operation and Maintenance**

#### **GENERAL**

Refer to tractor Operator's Manual for operating information on the tractor's hydraulic system.

Hydraulic systems using auxiliary valves should have them located for easy reach from the tractor seat. Hoses should be connected in such a manner that pushing forward on valve handles lowers the boom or dumps the bucket.

CAUTION: Always connect boom hoses to float section.

Weight added to rear of tractor provides better traction and an easier, more efficient loader operation. Extra weight, along with widening the rear wheels, reduces the risk of roll-over.

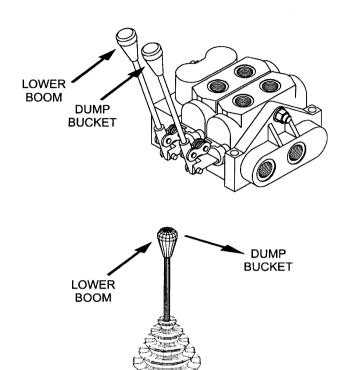


WARNING

The smaller the tractor is, the easier it will roll. We recommend that weight be added to rear tires with liquid or by the installation of rear wheel weights. Where additional weight is required, a counterweight box can be fabricated for tractors with three-point hitches.

Extra weight can also be added by the use of a heavy implement mounted to the three-point hitch.

A roll-over protective structure is also recommended.

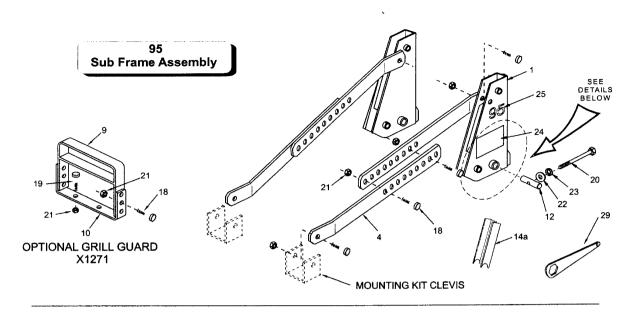


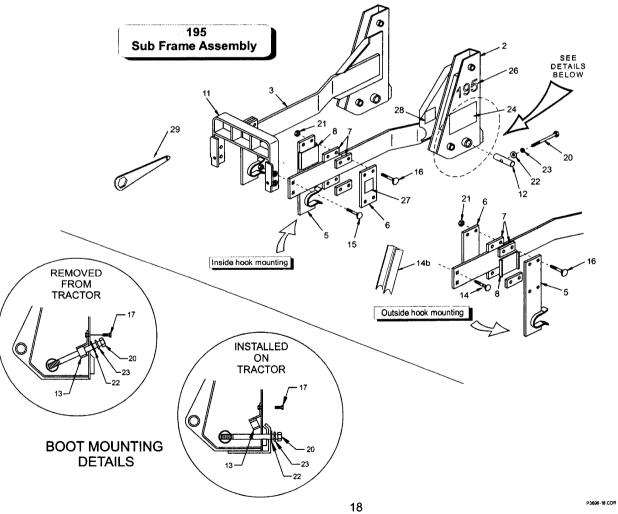
In cold weather, operate the tractor's engine at idle speed until the hydraulic fluid is warmed up. High engine speed when the hydraulic fluid is cold will cause the pump to wear prematurely.

Under normal conditions, operate the tractor's engine at 1/2 throttle. Shift the tractor into a low gear before entering a pile of material to minimize strain on loader arms.

# **Trouble Shooting**

PROBLEM	POSSIBLE CAUSE	REMEDY
Loader slow and/or will not dump.	Quick couplers leaking.	Check connections and compatibility or replace.
	Hydraulic oil too heavy.	Change or replace filter.
	Oil filter plugged.	Clean or replace filter.
	Hydraulic pump worn.	Repair or replace pump.
	Oil line restricted or leaking.	Check all hoses and tubes for leaks,
	<b>J</b> .	damage or restrictions. Replace damaged or restricted hoses or tube lines.
	Control valve does not shift properly. Air in hydraulic system.	Inspect, clean, repair or replace valve. Cycle lift cylinders and bucket cylinders several times to free system of air.
	Cylinder leaks internally.	Replace seals.
	Faulty valve.	Repair or replace valve.
Loader chatters or vibrates when	Air leak in pump inlet line.	Check, tighten or replace inlet line.
raising and lowering.	Air in hydraulic system.	Cycle lift cylinders and bucket cylinders.
<b>3</b>	Oil level too low.	Add oil as required.
Excessive movement at pivots	Worn bushings and/or pins.	Replace bushings and/or pins.
Pump noisy	Inlet line restricted or leaking.	Check for air leaks, restrictions or collapsed
	•	hose. Tighten or replace hose. Clean filter if necessary.
	Oil level too low.	Add oil as required.
	Pump worn or damaged.	Repair or replace pump.
Oil leaks.	Damaged fittings or hoses.	Replace damaged parts.
	Loose connections.	Tighten fittings.
	Worn or damaged O-ring wiper	Install a seal repair kit.
	seal in cylinder rod end.	·
	Worn or damaged O-rings in valve.	Install an O-ring repair kit.
Insufficient lift capacity	Improper hydraulic pump operation.	Repair or replace pump.
	Load is greater than boom lift capaci	
	Internal boom cylinder leakage.	Replace any worn parts and install
	I	a seal repair kit.
	Improper hydraulic valve operation.	Repair or replace valve.
Slow leakdown.	Worn control valve.	Have authorized dealer replace seals.
	Worn cylinder piston seals.	Have authorized dealer replace seals.
Excessive wear on bottom oil bucke and wear pads.	Float position not used while operati loader.	Use float position provided on valve.
Hydraulic cylinders inoperative.	Hose from control valve improperly connected.	Refer to plumbing diagrams.
Pump operating continually on clos center tractor hydraulic system.	Tractor control valve relief stuck open.	See your tractor manual for proper adjustment or Loader dealer for loader
center tractor hydrauno system.	орон.	valve. (3000 PSI is maximum pressure
	Hydraulic control valve set too low.	relief setting recommended.) Adjust valve in accordance with manual.
Loader lift and bucket tilt controls d	•	Refer to plumbing diagrams
not work according to decal.	noses improperly connected.	and correct hose connections.
Valve noisy and/or hot	Open center control valve on closed center tractor.	Replace relief valve with closed center plug and plug the power beyond adapter on valve
Tractor loads/pump squeals	Closed center control valve on open center tractor.	Install open center plug on optional valve. Replace closed center plug with relief and install short plug in place of power beyond adapter.

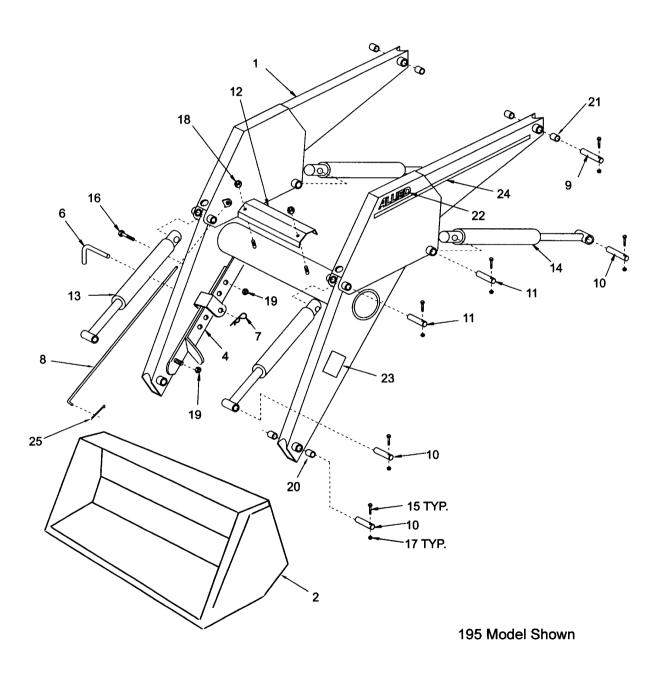




# 95, 195 Sub Frame Parts Table

Item	Part No.	Description	95	195
1	24518	Upright Weldment	2	-
2	24509	195 Subframe Weldment (Left)	-	1
3	24519	195 Subframe Weldment (Right)	-	1
4	113427	Strut Arm	4	-
5	113555	Hook Weldment	-	2
6	113556	Plate Clamp	-	2
7	113557	Spacer Block	-	8
8	113558	Shim	-	2
9	113462	Grill Guard Weldment	1	-
10	113460	Grill Guard Bracket	1	-
11	113444	Cross Member Weldment	-	1
12	113418	Pivot Shaft 1.5 dia. x 5.5 long	2	2
13	113281	Bolt Retainer Weldment	2	2
14a	113387	Loader Lift Lock 95 Ldr	2	-
14b	115758	Loader Lift Lock 195 Ldr	-	2
15	813059	Bolt Carr. 0.5 x 2.0 nc gr5 pl	-	4
16	813060	Bolt Carr. 0.5 x 3.0 nc gr5 pl	-	8
17	812026	Bolt Hex 0.313 x 1.0 nc gr5 pl	2	2
18	87553	Bolt Hex 0.5 x 1.75 nc gr5 pl	8	-
19	81627	Bolt Hex 0.5 x 3.0 nc gr5 pl	2	-
20	812088	Bolt Hex 0.625 x 7.0 nc gr5 pl	2	2
21	81966	Nut Lock 0.5 nc pl	12	12
22	113685	Washer Boot	2	2
23	81677	Washer Lock 0.625 pl	2	2
24	112812	Decal General Caution	2	2
25	113481	Decal - 95	2	-
26	113501	Decal - 195	-	2
27	113474	Decal Cross Member	-	2
28	112982	Decal Lift Lock Instruction	-	2
29	113661	Wrench	1	1

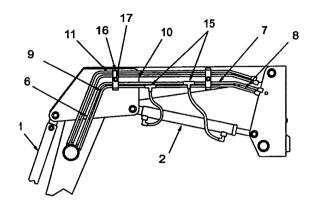
# 95, 195 Main Frame Assembly

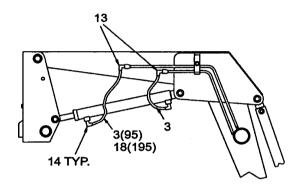


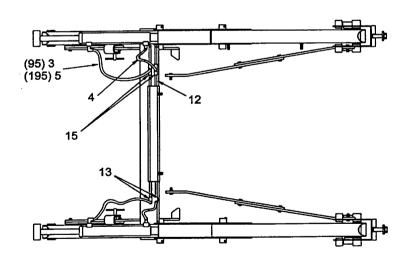
# 95, 195 Main Frame Parts Table

lte m	Part No.	Description	95	195
1	24520	95 Mainframe Weldment	1	-
1	24528	195 Mainframe Weldment	-	1
2	X1344	48.0" Bucket	-	-
2	X1345	60.0" Bucket	-	-
3	113467	Loader Stand L.H.	1	1
4	113463	Loader Stand R.H.	1	1
5	113465	Stand Arm	2	2
6	16035	Pin 0.5 dia.	2	2
7	12779	Hair Pin Clip # 9 Western Wire	2	2
8	113535	Levelling Rod	1	-
8	113565	Levelling Rod	-	1
9	104719	Pin 1.0 dia. x 6.0 long	2	2
10	106674	Pin 0.75 dia. x 6.0 long	6	6
11	113428	Pin 0.75 dia. x 5.0 long	4	4
12	113473	Tube Cover	1	1
13	•	Bucket Cylinder	2	2
14	-	Lift Cylinder	2	2
15	810640	Bolt Hex 0.313nc x 2.0 gr5 pl	12	12
16	84277	Bolt Hex 0.50nc x 1.50 gr5 pl	2	2
17	84541	Nut Lock (nylon) 0.313nc pl	12	12
18	81344	Nut Lock (nylon) 0.375nc pl	2	2
19	81966	Nut Lock (nylon) 0.50nc pl	4	4
20	113576	Bushing 0.75 ID x 1.0 OD	-	2
21	113577	Bushing 1.0 ID x 1.25 OD	-	2
22	112613	Decal - Allied x 1.40	2	2
23	112983	Decal - No Standing Under	2	2
24	52281-000	Bright Orange Scotchcal #72368	6ft	7ft
25	84162	Cotter Pin	1	1

# 95, 195 Loader Hydraulic Plumbing Diagram (95 Model shown)







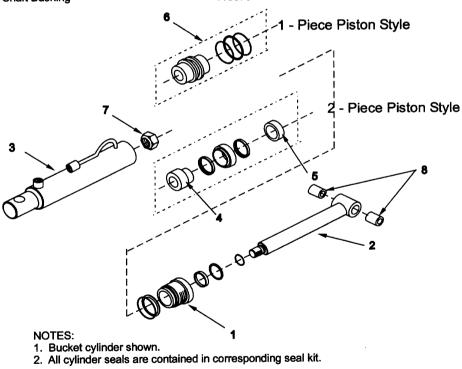
# 95, 195 Plumbing Parts Table

ltem	Part No.	Description	95	195
1	-	Bucket Cylinder	2	2
2	-	Lift Cylinder	2	2
3	813104	Hose 3/8 x 16.0 long 9/16 SWFJIC x 9/16 SWFJIC	6	2
4	113684	Hose 3/8 x 10.0 long 9/16 SWFJIC x 9/16 MORB	2	2
5	113683	Hose 3/8 x 14.0 long 9/16 SWFJIC x 9/16 MORB	-	2
6	113450	Tubing - Lift Cyl. Top Drop	1	1
7	113451	Tubing - Lift Cyl. Common (12.0")	1	1
8	113452	Tubing - Lift Cyl. Common (15.0")	1	1
9	113453	Tubing - Lift Cyl. Bottom ( Raise )	1	1
10	113454	Tubing - Bucket Cyl. Bottom (Rollback)	1	1
11	113455	Tubing - Bucket Cyl. Top ( Dump )	1	1
12	113456	Tubing - Bucket Cyl. Cross Tube	2	2
13	812296	Elbow 90 - 9/16 MJIC x 9/16 MJIC	4	4
14	811918	Elbow 90 - 9/16 MORB x 9/16 MJIC	6	4
15	812313	Tee 9/16 MJIC x 9/16 MJIC x 9/16 MJIC	4	4
16	11362	Clip Pipe Std.	5	5
17	81344	Nut Lock ( nylon ) 0.375 nc pl	3	3
18	113483	Hose 3/8 x 20.0 long 9/16 SWFJIC x 9/16 SWFJIC	-	2

95, 195 Hydraulic Cylinder Assembly

Description	Bucket	Cylinders	Lift Cylinders		
Loader	95	195	95	195	
Diameter	1.50	2.00	1.50	2.00	
Length of Stroke	13.25	13.38	14.50	15.00	
Retracted Length	21.50	23.63	22.50	25.00	
Extended Length	34.75	37.00	37.00	40.00	
Cylinder Assembly No.	24502	24534	24503	24978	
Seal Kit No.	X1401	X1348	X1401	X1349	
Shaft Diameter	1.00	1.25	1.00	1.50	
Description	Part Number		Part N	lumber	

item	Description	Part Number		Part Number	
1	Head Plate	24517	24516	24517	24522
2	Shaft	113355	113559	113361	113560
3	Cylinder Tube Weldment	24501	24532	24500	24977
4	Piston Half (wide)		114520		114520
5	Piston Half (narrow)		114521		114521
6	Piston (solid)	113412		113412	
7	Self Locking Nut	81988	812655	81988	812655
8	Shaft Bushing		113576		113576





**CAUTION: Maximum pressure - 2750 psi** 

Notes:

# **WARNING!**

LOOK OUT FOR CHILDREN. TEACH YOUR CHILDREN SAFETY. (INFORM THEM OF DANGERS AROUND MACHINES)

MANUAL MUST BE READ AND UNDERSTOOD BY OPERATOR.



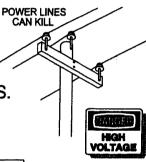
### TRANSPORT

**EMBLEMS MUST BE VISIBLE** 

ALWAYS MOVE EQUIPMENT IN LOW OR DOWN POSITION ESPECIALLY AROUND POWER LINES.



NEVER LEAVE EQUIPMENT IN RAISED POSITION.







SERVICE EQUIPMENT ONLY WHEN STOPPED AND WITH LIFT LOCKS IN PLACE AS SHOWN.

KEEP ALL GUARDS AND SHIELDS IN PLACE.

REPLACE DAMAGED OR WORN PARTS. FRAYED CABLES AND HOSES ARE DANGEROUS.



DO NOT CHANGE FACTORY SETTINGS.

KEEP DECALS CLEAN AND LEGIBLE. (REPLACEMENTS NORMALLY AVAILABLE)



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